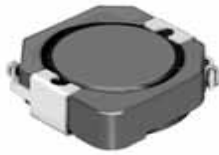


FCDM series (Rev. 4.0)



Features

- * RoHS compliant
- * Available in magnetic shielding
- * Low DC resistance
- * Suitable for large currents
- * Ideal for DC-DC converter inductor applications
- * Available on tape and reel for automatic surface mounting

Product Identification

FCDM **104** - **680** **M**
 1 2 3 4

1. Product Code
2. Size Code: 10.2 * 10.2 * 3.8mm
3. Inductance: 68uH
4. Tolerance: M=±20%, N=±30%

Applications

- * DC/DC converters, etc
- * Power supply for VTRs
- * OA equipment
- * LCD televisions
- * Notebook PCs
- * Portable communication devices

Operating & Storage Condition :

- * Operating Temp :Stand Type:-40 to +85 ℃
- * Storage Temp : Stand Type -40 to +85 ℃
- * Storage Life Time :12 Months @25 ℃,RH 65%

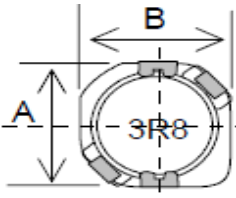
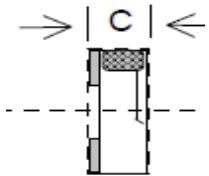
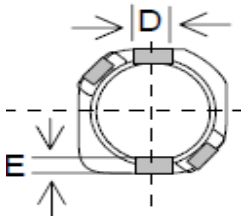
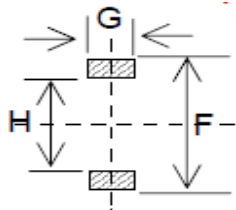
Test Equipment :

- * HP4284A,HP42841A-L,IDC,Q,RDC
- * HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions :

- * Ambient Temp : 20+/-15 ℃
- * Relative Humidity : 65±20%

Dimension & Recommended PAD Layout: [mm]

	Top View	Side View	Bottom View	Recommended PAD Layout				
								
Size Code	A(±0.5)	B(±0.5)	C(±0.2)	D(typ.)	E(typ.)	F(ref.)	G(ref.)	H(ref.)
104	10.2	10.2	3.8	3.0	1.25	10.7	3.8	7.3
105	10.2	10.2	5.0	3.0	1.25	10.7	3.8	7.3

FCDM series (Rev. 4.0)

Electrical Characteristics

P/N	Inductance (μ H) @100KHz / 1.0V	Tolerance (M/N)	DCR (m Ω) max. at 20 °C	IDC (A) max.
FCDM104-R33N	0.33	$\pm 30\%$	4.2	8.50
FCDM104-R68N	0.68	$\pm 30\%$	6.0	7.50
FCDM104-1R0N	1.00	$\pm 30\%$	10.0	6.50
FCDM104-1R3N	1.30	$\pm 30\%$	10.0	6.50
FCDM104-1R8N	1.80	$\pm 30\%$	10.0	6.10
FCDM104-2R2N	2.20	$\pm 30\%$	10.0	6.10
FCDM104-2R5N	2.50	$\pm 30\%$	10.5	6.10
FCDM104-3R0N	3.00	$\pm 30\%$	12.0	6.10
FCDM104-3R3N	3.30	$\pm 30\%$	13.0	6.10
FCDM104-3R8N	3.80	$\pm 30\%$	13.0	5.50
FCDM104-4R7N	4.70	$\pm 30\%$	22.0	5.60
FCDM104-5R2N	5.20	$\pm 30\%$	22.0	5.40
FCDM104-5R6N	5.60	$\pm 30\%$	29.0	5.00
FCDM104-6R8N	6.80	$\pm 30\%$	27.0	4.50
FCDM104-7R0N	7.00	$\pm 30\%$	27.0	4.50
FCDM104-8R2N	8.20	$\pm 30\%$	34.0	3.80
FCDM104-100M	10.0	$\pm 20\%$	35.0	3.80
FCDM104-150M	15.0	$\pm 20\%$	50.0	3.10
FCDM104-180M	18.0	$\pm 20\%$	70.0	2.60
FCDM104-220M	22.0	$\pm 20\%$	73.0	2.50
FCDM104-270M	27.0	$\pm 20\%$	87.0	2.30
FCDM104-330M	33.0	$\pm 20\%$	93.0	2.20
FCDM104-470M	47.0	$\pm 20\%$	128.0	1.90
FCDM104-680M	68.0	$\pm 20\%$	213.0	1.42
FCDM104-820M	82.0	$\pm 20\%$	265.0	1.32
FCDM104-101M	100.0	$\pm 20\%$	304.0	1.25
FCDM104-151M	150.0	$\pm 20\%$	506.0	0.85
FCDM104-221M	220.0	$\pm 20\%$	756.0	0.70
FCDM104-331M	330.0	$\pm 20\%$	1090.0	0.52
FCDM104-821M	820.0	$\pm 20\%$	2600.0	0.30

* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at $\Delta T=40^{\circ}\text{C}$, whichever is lower. ($T_a=20^{\circ}\text{C}$)

* Tolerance: M= $\pm 20\%$, N= $\pm 30\%$

FCDM series (Rev. 4.0)**Electrical Characteristics**

P/N	Inductance (uH) @100KHz / 1.0V	Tolerance (M/N)	DCR (mΩ) max. at 20 °C	IDC (A) max.
FCDM105-1R2N	1.20	±30%	12.0	8.30
FCDM105-1R5N	1.50	±30%	14.0	8.30
FCDM105-1R8N	1.80	±30%	15.0	7.85
FCDM105-2R2N	2.20	±30%	16.0	7.50
FCDM105-2R7N	2.70	±30%	18.2	7.10
FCDM105-3R3N	3.30	±30%	19.5	6.50
FCDM105-3R9N	3.90	±30%	22.5	6.00
FCDM105-4R7N	4.70	±30%	28.0	5.50
FCDM105-5R6N	5.60	±30%	30.0	4.50
FCDM105-6R8N	6.80	±30%	36.0	4.90
FCDM105-8R2N	8.20	±30%	45.0	4.55
FCDM105-100M	10.00	±20%	51.0	4.00
FCDM105-150M	15.00	±20%	57.0	3.30
FCDM105-180M	18.00	±20%	59.0	3.10
FCDM105-220M	22.00	±20%	82.0	2.90
FCDM105-330M	33.00	±20%	95.0	2.60
FCDM105-470M	47.00	±20%	183.0	2.00
FCDM105-560M	56.00	±20%	205.0	1.80
FCDM105-680M	68.00	±20%	234.0	1.60
FCDM105-820M	82.00	±20%	247.0	1.40
FCDM105-101M	100.00	±20%	325.0	1.35
FCDM105-151M	150.00	±20%	403.0	1.10
FCDM105-181M	180.00	±20%	527.0	1.00
FCDM105-221M	220.00	±20%	668.0	0.94
FCDM105-331M	330.00	±20%	775.0	0.60
FCDM105-471M	470.00	±20%	1300.0	0.54

* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at $\Delta T=40^{\circ}\text{C}$, whichever is lower. ($T_a=20^{\circ}\text{C}$)

* Tolerance: M= ±20%, N= ±30%